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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,790	03/22/2001	Roger Yu	YURO3001/EM/6619	3053

7590 03/29/2004  
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EXAMINER

CORSARO, NICK

ART UNIT	PAPER NUMBER
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2684

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DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/813,790

**Applicant(s)**

YU, ROGER

**Examiner**

Nick Corsaro

**Art Unit**

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2001.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because the abstract has claim language.

Correction is required. See MPEP § 608.01(b).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to

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present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Correction is required.

For examination purposes the claim will be interpreted as one sentence and excluding any narrative phrases.

4. The phrase "a kind of management system" on line 1, and the phrase "bringing unlimitedly expandable" on line 2 in claim 1 are relative phrases which renders the claim indefinite. The phrase "a kind of management system", and the phrase "bringing unlimitedly expandable" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Correction is required.

For examination purposes, the phrase "a kind of management system" will be read as "a management system" and the phrase "bringing unlimitedly expandable" will be read as "bringing expandable".

5. Regarding claim 2, the phrase "preferably equipped" on line 4, renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Correction is required.

For examination purposes the phrase "preferable equipped" will be read as "equipped".

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (6,357,021) in view of Kinoshita et al. (6,516,374).

Consider claim 1, Kitagawa discloses a management system kit used for the host of Serial PDA or Handheld PC (HHPC) bringing expandable capability to PDA with small memory capacity (see col. 1 lines 5-22, col. 2 lines 25-60). Kitagawa discloses a memory management system to control the memory or DRAM in the host of PDA or handheld PC (HHPC) and the storage device of the data conversion control mechanism connected to the serial port externally (see col. 3 lines 1-7). Kitagawa discloses a data conversion control mechanism mainly composed of a serial input/output, CPU, firmware program, storage device and power supply (see col. 3 lines 7-60). Kitagawa discloses the programs and data files in the host of PDA and the data conversion control units can be managed and mutually delivered by placing the memory management system in the host of PDA or handheld PC (HHPC) and connecting the serial port of the PDA host and the data conversion control mechanism (see col. 2 lines 22-67, col. 3 lines 1-67, and col. 4 lines 1-2).

Kitagawa discloses the memory management controller system on a circuit board in a PDA, however does not specifically disclose embedded. Kinoshita teaches embedded (see col. 3 lines 5-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kitagawa, and have the management embedded, as taught by Kinoshita, thus increasing the number of functions of the PDA, as discussed by Kinoshita, (col. 1 lines 15-21).

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Consider claim 2, Kitagawa does not specifically disclose a low-power and high-speed processor. Kinoshita teaches a low-power and high-speed processor (see col. 3 lines 5-33, and col. 6 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kitagawa, and have a low-power and high-speed processor, as taught by Kinoshita, thus increasing the number of functions of the PDA, as discussed by Kinoshita, (col. 1 lines 15-21).

Consider claim 3, Kitagawa does not specifically disclose the power supply of the data conversion control mechanism is a re-charging or alkaline battery. Kinoshita teaches the power supply of the data conversion control mechanism is a re-charging or alkaline battery (see col. 4 lines 5-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kitagawa, and have the power supply of the data conversion control mechanism is a re-charging or alkaline battery, as taught by Kinoshita, thus increasing the number of functions of the PDA, as discussed by Kinoshita, (col. 1 lines 15-21).

Consider claim 4, Kitagawa does not specifically discloses the storage device is a hard drive, flash or DRAM. Kinoshita teaches the storage device is a hard drive, flash or DRAM (see col. 3 lines 5-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kitagawa, and have the storage device be a hard drive, flash or DRAM, as taught by Kinoshita, thus increasing the number of functions of the PDA, as discussed by Kinoshita, (col. 1 lines 15-21).

Consider claims 5 and 6, Kitagawa teaches the data conversion control mechanism is installed with a USB port to connect to ordinary PC or Note-Book PC (see coll. 2 lines 22-67 and col. 3 lines 1-67). Kitagawa does not specifically disclose battery charging. Kinoshita teaches

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battery charging (see col. 3 lines 5-67, col. 4 lines 1-67, and col. 5 lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kitagawa, and have battery charging, as taught by Kinoshita, thus increasing the number of functions of the PDA, as discussed by Kinoshita, (col. 1 lines 15-21).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(6,581,019), Bapst teaches a PDA.

9. Any inquiry concerning this communication should be directed to Nick Corsaro at telephone number (703) 306-5616.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 customer Service Office whose telephone number is (703) 306-0377.

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Nick Corsaro

Pr. mag

**NICK CORSARO  
PATENT EXAMINER**